A METHOD FOR BI-DIRECTIONAL DATA SYNCHRONIZATION BETWEEN DIFFERENT CLOCK FREQUENCIES

5   ## ABSTRACT OF THE DISCLOSURE

A method for bi-directional data synchronization between different clock frequencies is described wherein a state machine counter is provided a first clock signal having a first frequency. The state machine counter is then provided a second clock signal having a second frequency that is an integer multiple of the first clock

10   frequency. The state machine counter has an integer number of states equivalent to the ratio of the second clock signal frequency to the first clock signal frequency. The first clock signal is applied to reset the state machine counter to an initial state. The state machine counter generates an intermediate clock signal whenever the state machine increments through all states to return to the initial state. The

15   intermediate clock is then applied to synchronize data between the first clock frequency and the second clock frequency.

20   APP Shell